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Appendix 1

FLEET MAINTENANCE

PURPOSE

To furnish operational guidelines for a Bureau aircraft maintenance system and establish procedures necessary to maintain aircraft on a routine and timely basis.

POLICY

BLM aircraft will be maintained in airworthy condition with a neat and professional appearance. Airworthiness and appearance of aircraft can be determined only by those people who have direct operational control. Pilots will be considered to have primary responsibility for the determination of those factors.

A. Maintenance Program.

- (1) Certified aircraft must have an inspection program approved by the FAA: or the Aircraft Manufacturer approved program.
- (2) Surplus military or uncertificated aircraft will be maintained in accordance with the military program or the manufacturers recommend procedures.

B. Maintenance Records.

- (1) Log book records will be maintained at the Boise base and must be kept up-to-date. Logs will only travel with the aircraft to another location when major maintenance is being performed.
- (2) Computerized maintenance historical data will be maintained by the BLM Chief of Aircraft Maintenance (CAM) for all fleet aircraft.

AUTHORITY

- A. A qualified mechanic, by experience or training, on the type of aircraft being maintained. Maintenance personnel must have a current Airframe and Power plant (A&P) Certificate or work for an approved FAA Repair Station, certificated for the type aircraft being maintained. Preventive maintenance may be performed per Part 43 limited to Appendix A of FAR Part 43. Persons returning aircraft to service must meet the qualifications of Item 1 and FAR Part 43.5.
- B. Maintenance and modification will be performed at an OAS approved vendor, except in the circumstances where none is available.
- C. Field maintenance can be performed at OAS vendors or, as necessary, by pilots possessing an A&P mechanic rating. The person ordering maintenance must assure the agency is getting quality performance at a reasonable price.

AIRCRAFT MAINTENANCE AT COMMERCIAL FACILITIES

- A. Pilots who require maintenance services on an aircraft shall contact the CAM or the authorized OAS maintenance representative, outlining the type of services required. If maintenance at commercial facilities is determined to be appropriate, the pilot will coordinate with the contract facility and prepare a work order indicating the maintenance services to be performed. The pilot will subsequently notify the CAM of the work order number, work to be accomplished and the facility or individual's name who will perform the work.
- B. Any maintenance request that exceeds \$2,500 must be approved by the CAM prior to proceeding with repairs/service with a field repair facility.
- C. The CAM will evaluate, counsel and qualify commercial maintenance facilities or qualified individuals for work on BLM aircraft. A list of approved facilities/individuals will be furnished to the pilots, and each GACC..
- D. In coordination with the OAS, the BLM National Aviation Office (NAO) may establish a Blanket Purchase Agreement (BPA), not to exceed \$10,000, with the approved facility or individual to perform maintenance services on BLM aircraft. The BPA will designate those individuals authorize to sign receipt for maintenance services received.
- E. Pilots with aircraft requiring annual or 100-hour/phase inspections at commercial facilities will notify the CAM prior to obtaining service. Inspections shall be accomplished in accordance with applicable manufacturer's instructions, FAR'S 91 and 43, and OAS procedures.
- F. Hour meter (Hobbs) time will be used for recording inspection times. When the aircraft has exceeded 100-hours/phase since last inspection, the excess time must be included in computing the next 100-hour/phase due time.
- G. When an aircraft, engine, or propeller is approved for return to service a certificated individual or facility will complete and sign the maintenance release statement provided or enter a statement in the flight log if provided. Pilots are responsible to ensure that the approval for return-to-service is appropriately accomplished.
- E. Pilots will ensure that the maintenance release and the OAS-2 blue sheet documenting the maintenance are sent to the CAM upon the return-to-service of the aircraft.

RESPONSIBILITIES

A. Maintenance Contracting.

- (1) Contracting Officer's Representative (COR). The COR is authorized to perform administrative functions pertaining to all BLM fleet aircraft maintenance performed under contract. The BLM CAM is designated COR on all maintenance contracts.
- (2) Project Inspector (PI). Pilots and/or mechanics may be appointed as PI to assist the COR. This requires specific training to be conducted by the COR, COTR, or CO and will be documented.

B. Flight Operations. Daily flight status must be coordinated between the pilot, the appropriate GACC, customer, and the maintenance staff/facility. The following tasks are the responsibility of the Pilot in charge:

- (1) Coordinate with requesting office to determine type of aircraft and associated equipment necessary to perform particular flight missions.
- (2) Coordinate with the customer any recommended alternatives when a maintenance schedule adversely affects mission requirements. In the event the scheduling is not compatible with the customer's request, the CAM will be consulted for a deferred maintenance determination.
- (3) Notify the GACC and CAM 20 hours prior to attaining 100-hour/phase inspection times.
- (4) Contact the responsible mechanic/facility immediately for an evaluation of an aircraft's status when its airworthiness is in question.
- (5) After completion of all maintenance and required OAS-2 entries, the PIC shall have removed the blue copy of the OAS-2 and forward it to the CAM.

C. Pilots.

- (1) Prior to flight, pilots shall have an OAS-2, Aircraft Flight/Use report, Deferred Maintenance Items sheet, and the MEL if appropriate for the aircraft to be flown. The OAS-2 and Deferred Maintenance Items sheet must be reviewed to determine maintenance status of the aircraft prior to flight.
- (2) Pilots of reciprocating engine aircraft are responsible for scheduling oil changes except in conjunction with an inspection, i.e., 100-hour or annual.
- (3) Aircraft flight/Use Reports.
 - (a) There are four copies of any OAS-2 sheet. The white and yellow sheets are used for billing purposes. The single blue sheet is used exclusively for maintenance tracking. The pink sheet, which remains in the OAS-2 book, is also used for maintenance purposes.
 - (b) An OAS-2 line entry will be completed for each flight leg immediately upon termination of that flight leg. Upon completion of multiple flight legs on a calendar day, an OAS-2 sheet will be completed. All applicable data will be correctly entered in appropriate spaces of the OAS-2 form.

- (c) On Monday of each week, the blue copies of the OAS-2 will be removed and forwarded by US mail directly to the CAM only, and not to any third party. If circumstances do not permit a Monday mailing, as soon as possible. Completed OAS-2 books with the pink sheets still attached, will also be forwarded by US mail to the CAM only at the first available opportunity, and not to any third party.
- (4) Pilots will provide detailed entries into the aircraft's OAS-2 book to include the following turbine engine cycles in accordance with the following definitions:
 - (a) Allison 250-C20: A cycle is a start or start attempt:
 - (b) Garrett Air search TPE 331: A cycle is an operational sequence; i.e., an engine start, aircraft takeoff and landing, followed by engine shutdown;
 - (c) Pratt and Whitney PT6 Series: A full cycle is any flight consisting of a start, idle, take off, flight, landing, idle, shutdown. An abbreviated cycle is an idle, takeoff, flight, and landing, idle. ALL STARTS are to be logged as a full cycle.
 - (d) Other turbine engines as prescribed by the CAM.
- (5) When aircraft arrive for maintenance, the PIC shall insure that all discrepancies are transcribed from the OAS-2's to a work order.

D. Aircraft Mechanic. BLM aircraft are maintained by contract facilities. Each State will establish a local contract for daily maintenance coordination. The authorized mechanic or facility will coordinate with the pilot to:

- (1) Review the aircraft's records and Minimum Equipment List (MEL) to ensure the aircraft will mechanically meet mission requirements. If maintenance is necessary, furnish estimated completion date.
- (2) Schedule aircraft into maintenance, final inspection, test flights, and approval for return-to-service procedures.
- (3) Initiate work orders for BLM approval to schedule maintenance on the aircraft.
 - (a) Maintenance personnel will inspect the aircraft, correct discrepancies and an FAA authorized Aircraft Inspector will initial each correction on the work order. When all discrepancies are corrected or deferred, Maintenance will conduct the final inspection.
 - (b) The mechanics completing the work shall return the aircraft to service in accordance with FAR Part 43.9. Appropriate entries shall be made in the "Corrective Action" block of the OAS-2 and a Maintenance Release shall be filled out by the mechanic to be entered into the appropriate logbook by the CAM (Chief, Aviation Maintenance). With the approval of the CAM, discrepancies deferred to the next scheduled maintenance will be entered or maintained on the aircraft's Deferred Maintenance Items sheet.
- (4) Complete all entries to the weight and balance records, update inspection procedure cards, and update the Pilot's Operating Handbook.

INSPECTIONS

- A. Inspection Program. Except those aircraft being maintained under an approved military inspection program or a continuous maintenance program, no Bureau aircraft may be operated within the preceding 12 calendar months, unless it has had:
- (1) An annual inspection in accordance with FAR Part 43 and has been approved for return-to-service by a person authorized by FAR Part 43.7;
 - (2) An inspection for issuance of an Airworthiness Certificate.
- B. Mandatory Inspections.
- (1) Bureau aircraft must receive an annual inspection or 100-hour/phase inspection and been approved for return-to-service in accordance with FAR Part 43 prior to operation.
 - (2) Bureau aircraft operated under an approved inspection program or a continuous military maintenance program shall be operated in accordance with the approved program.
 - (3) 100-hour or phase inspections may be exceeded by a maximum of 10 percent only for returning the aircraft to a maintenance facility. This time will be subtracted from the next inspection time.
- C. Aircraft Discrepancies.
- (1) All maintenance discrepancies must be either corrected or documented as deferred on the OAS-2 and the Deferred Maintenance Items (DMI) sheet.
 - (2) With the approval of the CAM, pilots may defer discrepancies not affecting airworthiness. Multi-engine aircraft will be operated in accordance with the MEL if established for the make/model. Pilots will note on the OAS-2 and the DMI sheet their name and date the CAM deferred the item.
 - (3) All discrepancies that affect airworthiness shall be corrected by authorized maintenance personnel prior to flight. Pilots are responsible for determining aircraft airworthiness status.
 - (4) When a discrepancy is deferred, it will remain on the DMI sheet until corrected. New OAS-2 books will have the discrepancies transferred from the proceeding book.
 - (5) Logging of maintenance shall be as described on page 25 of this document in 5.D. (3)(b).
 - (6) Pilots will record all maintenance discrepancies in the OAS-2. The maintenance facility will record discrepancies on a maintenance work order
 - (7) The aircraft's airworthiness release will be recorded on the OAS-2.
- D. Airworthiness Directives and Special Inspections.
- (1) Airworthiness Directives and/or Military Safety of Flight Messages will be performed in accordance with the requirements of that Directive.
 - (2) Special inspections will be performed as required by the maintenance program approved for the affected aircraft.
 - (3) All Manufacturers Mandatory Service Bulletins will be performed in accordance with the requirements of the manufacturer.

- E. Weight and Balance. Aircraft must be weighed using certified scales every 36 calendar months. Weight and balance data must be recorded in the operating manual for the aircraft. At the time equipment is either added or removed, a new weight and balance must be calculated OR the old weight and balance amended and recorded.
- F. Unscheduled Maintenance and Repairs. Pilots requiring unscheduled maintenance will notify the CAM. Maintenance will be accomplished in accordance with applicable manufacturer's instructions, FAR'S 91 and 43, and OAS procedures. Repair Stations will use the statement provided in the OAS-2 book, for approval for return-to-service. Pilots are responsible to ensure that the approval for return-to-service is appropriately accomplished.
- G. Modifications. Due to the need to maintain continuity and commonality throughout the BLM fleet, modifications will be accomplished at the maintenance base in Boise, Idaho. If extenuating circumstances deem it necessary, authorizations for modifications at facilities other than Boise must be obtained from the CAM.

QUALITY CONTROL

The maintenance person and/or pilot responsible for a Bureau aircraft repair or inspection will:

- A. Coordinate with the maintenance facility for scheduling initial and final inspection, and aircraft approval for return-to-service.
- B. Review all engine/airframe logbooks, Airworthiness Directives, and other required items and prepare the appropriate inspection sheets. All inspections or component maintenance, which will fall due during the next 100-hour/phase or 90 days, will be entered on the work order.
- C. Evaluate discrepancies noted by pilots/maintenance personnel and determine appropriate action. When the aircraft is found to be unairworthy, GACC will be notified.
- D. Conduct an initial inspection and enter maintenance discrepancies on work orders for appropriate action to include requirements to change item(s) in the Pilot's Operating Handbook (POH).
- E. Forward to the CAM any changes or prepare information and a description of modifications which may cause a change to the POH.
- F. Assign or conduct test flights, as required. All deferred discrepancies will be listed on the DMI sheet.
- G. Identify maintenance discrepancies noted during functional test flights, record discrepancies and communicate to maintenance.
- H. Notify the user of an aircraft's approval for return-to-service after all appropriate maintenance releases have been signed/entered in the aircraft and engine logbooks and FAA Repair Station requirements have been satisfied.

MAINTENANCE AND TEST FLIGHTS

- A. Replacement of engine, power train, rotor system, landing gear, flight controls or control rigging requires a subsequent test flight. The cost of any maintenance flights will be charged to the Working Capital Fund (WCF), and entered on the OAS-2 used for the operational test flight. The use code MA will be entered on the OAS-2's accompanied by an explanation in the remarks section of why the flight took place.
- B. If ground tests of inspections show conclusively that preventive maintenance, rebuilding or alteration has not appreciably changed the flight characteristics or substantially affected their flight operation; the aircraft need not be flight-tested.
- C. Test flights will be conducted with minimum flight crew aboard and in accordance with 351DM2.4 2(b). Passengers will not be carried during test flights. A mechanic may be carried with the authorization of the CAM. A Government pilot who is OAS carded or FAA type rated and current in the make/model aircraft will conduct a test flight as required.

FERRY FLIGHTS

With the approval of the CAM, any aircraft that does not meet its type design because of damage, inoperable equipment or systems may be flown to a repair facility. Passengers are not permitted on such flights. Ferry flights may be paid by the WCF when the CAM determines that the cost of ferry to a Boise facility, or the contract facility, offsets the higher cost of maintenance in the field facility.

PARTS INVENTORY MANAGEMENT

- A. The CAM will be responsible for the inventory of all spare parts. Responsibility may be delegated, as necessary, by the CAM.
- B. Storage and Security will be furnished by the NIFC Warehouse, Boise, Idaho.
- C. Consumable parts will be stored at aircraft locations based on need and usage.
- D. Universal parts and consumable parts may be secured by field pilots or maintenance personnel for locations where aircraft are based. Procurement will be by OAS Blanket Purchase Order (BPA), OAS VISA card, or OAS maintenance contract and are accompanied by a DI-1, Requisition form.

PAYMENT

Aircraft maintenance costs will be borne by the OAS WCF only under the following conditions:

- A. The vendor's invoice must have been authorized by the CAM prior to OAS payment.
- B. The cost must have been incurred at an **OAS approved facility** or with an authorized individual.
- C. A proper invoice/work order is signed by a BLM pilot or Aviation Manager indicating all indicating all services and/or supplies are legitimate. A properly constituted invoice must include the following information and/or documentation:
 - (1) Business Name;
 - (2) Purchase order number or other authorization for delivery of property or services;
 - (3) Description, price, and quantity of property and services actually delivered or rendered;
 - (4) Payment terms;
 - (5) Name, (where appropriate), title, phone number, and complete mailing address of responsible official to whom payment is to be sent;
- (6) Agency personnel signing that they have received supplies and/or services from an authorized facility or individual are required to submit a copy of each work order or receipt for supplies to OAS as soon as practicable after supplies have been received;
- (7) OAS inspection and discrepancy forms.

- (8) All invoices for Aircraft Maintenance must be billed to the OAS only.

Office of Aircraft Services
P.O. Box 15428
Boise, Idaho 83715-5428

MINIMUM EQUIPMENT LISTS (MEL'S)

The Minimum Equipment Lists (MEL'S) will be used and complied with when approved for the aircraft. The MEL will be found in the back of the Aircraft Flight Manual, as well as directions to its use. The OAS-2 and Deferred Maintenance Items (DMI) Log must reflect the discrepancy being deferred via the MEL. The letter "M" denotes a maintenance function requiring a mechanic comply with the MEL; the letter "O" denotes the flight crew must comply. "INOP" stickers are found inside the flight logbook or maintenance notebook.

Inoperable items not listed in the MEL must be repaired before flight or a ferry permit must be obtained. In these instances, the CAM should be notified. Intermittently operating items are considered to be inoperative.